REMARKS

Claims 1-9 are pending. By this Amendment, claim 1 is amended. Support for the amended features of claim 1 can be found on page 3, lines 33-37 and page 5, line 27-page 6, line 4, for example.

Entry of the Amendment is proper under 37 CFR §1.116 since the Amendment: (a) places the application in condition for allowance for the reasons discussed herein; (b) does not raise any new issues requiring further search and/or consideration; (c) does not add any additional claims; and (d) places the application in better form for appeal, should an appeal be necessary. Entry of the Amendment is thus respectfully requested.

An Election of Species was required in this application. Accordingly, Applicants elected Figs. 1-3, 5, 6, 9 and 10. Claims 1, 3, 4 and 7-9 read on the elected Figs. 1-3, 5, 6, 9 and 10 and claim 1 remains generic to all species. Applicants thus request rejoinder of claims 2, 5 and 6 when claim 1 is found to be allowable.

Claim 1 was rejected under 35 U.S.C. §102(e) over Wilson et al. (Wilson), U.S. Patent No. 6,687,052. The rejection is respectfully traversed.

Wilson fails to disclose an optical microscope with a modifiable optical transmission screen comprising zones each presenting a first passing state and a second closed state, the modifiable optical transmission screen being placed on an optical path upstream from the object and that generates in the object plane an image of the modifiable optical transmission screen coinciding substantially with the spots of the object to be observed, the spots to be observed corresponding to a structure of the object, as recited in claim 1.

Wilson discloses a confocal microscope wherein a mask 6 (which may be a spatial light modulator) is encoded with a predetermined pattern that modulates spatially, in a plane of the mask, the light from the first light source 1 (col. 3, lines 26-29). As with confocal microscopes, the objective is to reconstruct an image of an object, outgoing from elementary

zones of the object (spots of the object to be observed). Conversely, with claim 1, the spots to be observed are predetermined spots and correspond to the structure of the object (i.e., the spots to be observed corresponding to a structure of the object).

Wilson's confocal microscope enables a high resolution to be obtained and the pattern of spots using a confocal microscope is determined by the desired resolution. Moreover, while aiming for an optimized resolution, confocal microscopes use two optical transmission screens (for example pinholes) placed on the optical path respectively upstream and downstream from the object. The two screens may be constituted by one single screen, wherein the optical path passes twice through the same screen. In any event, the main feature of a confocal microscope is the fact that the optical path passes twice through the screen.

The pattern of spots of Wilson's confocal microscope thus does not coincide with spots corresponding to the structure of the object. When observing bio-chips, for example, the zones to be observed typically have dimensions of a few tens or hundreds of micrometers. The pattern of spots thus would not coincide with the pad-formed structure of the bio-chip. With the combination of features in claim 1, the structure of the object to be observed determines the configuration of the transmission screen.

In view of the foregoing, Wilson fails to disclose all of the features recited in claim 1. It is respectfully requested that the rejection be withdrawn.

Claims 1 and 3 were rejected under 35 U.S.C. §102(b) over Krause, U.S. Patent No. 5,587,832. The rejection is respectfully traversed.

Krause, similar to Wilson, fails to disclose an optical microscope with a modifiable optical transmission screen comprising zones each presenting a first passing state and a second closed state, the modifiable optical transmission screen being placed on an optical path upstream from the object and that generates in the object plane an image

of the modifiable optical transmission screen coinciding substantially with the spots of the object to be observed, the spots to be observed corresponding to a structure of the object, as recited in claim 1.

Krause discloses a confocal microscope wherein an aperture array 14 transforms illuminated light from a light source 18 into sequentially complementary patterns of illumination spots which are imaged on the specimen 20 by a dichroic beam splitter 22 and a microscope objective lens 24 (col. 3, line 63-col. 4, line 3). For reasons similar to Wilson, because Krause uses a confocal microscope, the spots to be observed do not correspond to the structure of the object.

In view of the foregoing, Krause fails to disclose all of the features recited in claim 1 as well as the additional features recited in claim 3. It is respectfully requested that the rejection be withdrawn.

Claims 3 and 4 were rejected under 35 U.S.C. §103(a) over Wilson in view of Krause, claims 7 and 8 were rejected under 35 U.S.C. §103(a) over Wilson in view of Richardson, U.S. Patent No. 6,704,140, claims 7 and 8 were rejected under 35 U.S.C. §103(a) over Krause in view of Richardson, claim 9 was rejected under 35 U.S.C. §103(a) over Wilson in view of Richardson and Weiss et al. (Weiss), U.S. Patent No. 6,369,939, and claim 9 was rejected under 35 U.S.C. §103(a) over Krause in view of Richardson and Weiss. The rejections are respectfully traversed.

Richardson and Weiss fail to overcome the deficiencies of Wilson and Krause in disclosing or suggesting the modifiable optical transmission screen, as recited in claim 1. It is respectfully requested that the rejections be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

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Date: December 30, 2005

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